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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/705,455	11/12/2003	Yusaku Fujii	1075.1237	6699

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EXAMINER

KOZIOL, STEPHEN R

ART UNIT	PAPER NUMBER
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2624

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09/28/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/705,455

Applicant(s)

FUJII, YUSAKU

Examiner

Stephen R. Koziol

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09/14/2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 9, 13, and 15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-12, 14 and 16-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

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DETAILED ACTION

1. Applicant's arguments with respect to claims 1 and 20-27 have been considered but are moot in view of the new grounds of rejection.

Claim Rejections - 35 USC § 102.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims (1-4, 7, 8, 10-12, 14, and 16-27) are rejected under 35 U.S.C. 102(b) as being anticipated by Hsu et al. US 6,134,340.

Regarding claim 1, Hsu teaches an organism characteristic data acquiring apparatus for acquiring organism characteristic data for at least one of registration organism characteristic data storage and an authentication unit for authenticating the identification object person, from each of an identification object person and/or a registration object person to authenticate the identification object person based on the organism characteristic data (col. 6 ln. 24-48), comprising:

- i. a sampling section for sampling a partial image of a portion of an organism from each of the identification object person and/or the registration object person (col. 2 ln. 13-34);

- ii. a detection section for detecting, every time a partial image is sampled by said sampling section, a relative positional relationship between the partial image and one of other partial images sampled already (fig 2 item 54, introduced in col. 2, ln. 16-20, and expanded upon in col. 9 ln. 27-60, where the disclosed “feature detection” unit comprises the claimed detection section);
- iii. an extraction section for extracting, every time a partial image is sampled by said sampling section, characteristic portion data including characteristic information unique to the organism portion from the partial image (fig 2 items 46-50, introduced in col. 2, ln. 16-20 and expanded upon in col. 9 ln. 42-60 where Hsu’s system extracts reference patches not limited to containing ridge bifurcation points which correspond to the claimed extraction of characteristic information); and
- iv. a synthesis section for synthesizing, every time a partial image is sampled by said sampling section, the characteristic portion data of the partial image extracted by said extraction section and characteristic portion data of the other partial image based on the relative positional relationship of the partial image detected by said detection section and outputting a result of the synthesis as organism characteristic data of the portion of the organism for the at least one of registration organism characteristic data storage, and an authentication unit for authenticating the identification object person (fig 2 items 54-58, introduced in col. 2, ln. 22-39 and expanded upon in col. 16 ln 10-51, where Hsu discloses using the relative positional relationship of the images to authenticate an object person).

Regarding claims 2-4, 7, 8, 10-12, 14, and 16-19 the grounds for rejection under 35 USC §102(b) are the same as set forth the in last Office Action.

Regarding claim 20 Hsu discloses an authentication apparatus for authenticating an object person of authentication based on the organism characteristic data (col. 6 ln. 24-48), comprising:

- i. a sampling section for sampling a partial image of a portion of an organism of an-the object person of authentication (see arguments re claim 1);
- ii. a detection section for detecting, every time a partial image is sampled by said sampling section, a relative positional relationship between the partial image and one of other partial images sampled already (see arguments re claim 1);
- iii. an extraction section for extracting, every time a partial image is sampled by said sampling section, characteristic portion data including characteristic information unique to the organism portion from the partial image (see arguments re claim 1);
- iv. a synthesis section for synthesizing, every time a partial image is sampled by said sampling section, the characteristic portion data of the partial image extracted by said extraction section and characteristic portion data of the other partial image based on the relative positional relationship of the partial image detected by said detection section and outputting a result of the synthesis as organism characteristic data of the portion of the organism (see arguments re claim 1); and
- v. a collation section for executing a collation process using the organism characteristic data from said synthesis section in order to perform personal identification of the object person of authentication and outputting a result of the collation process as an

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authentication result (col. 16 ln. 10-51, where Hsu discloses processing the results of characteristic data correlation to determine whether or not the user can be authenticated).

Newly amended claim 21 has been fully considered and is rejected for the reasons outlined re claim 20 supra.

Newly amended claims 21, 22, 24 and 26 have been fully considered and are rejected for the reasons outlined re claim 1 supra.

Regarding claim 23 Hsu discloses the organism characteristic data acquiring method according to claim 22 wherein a partial image of a pattern formed from a ridge on the portion of the organism is sampled by sampling (Hsu, figs. 3 and 4, also, col. 6, ln. 24-48).

Newly amended claims 25 and 27 have been fully considered and are rejected for the reasons outlined re claim 23 supra.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5 and 6 are rejected under 35 USC § 103 as being unpatentable over Hsu et al. US 6,134,340 in view of Morita et al. US 4,827,527 for the same reasons as set forth the in last Office Action.

Response to Arguments

6. Applicant has amended claims 1, 2, 10, 11, 17 and 19-27 while canceling claims 9, 13 and 15.

Applicant's remarks filed 14 September 2007 have been fully considered but are not persuasive.

Applicant alleges Hsu fails to describe all the features of claim 1, specifically the "sampling section," "detection section," "extraction section" and "synthesis section" as recited in claim 1 (Remarks pp. 11).

Examiner respectfully disagrees.

More specifically, with regard to claim 1 Applicant alleges Hsu fails to describe "a sampling section for sampling a partial image of a portion of an organism from each of the identification object person and/or the registration object person." Applicant further alleges Hsu discloses capturing an entire fingerprint image and so does not meet the limitation of "sampling...a partial image of a portion of an organism" (Remarks pp. 11). In col. 2 ln. 13-34 Hsu introduces the biometric data acquisition system complete with sampling section, wherein, as indicated by figs 3, 5 and 6 (none of which are whole images, as areas of the biometric feature of the portion of an

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organism are cut-off on all sides of the image, thus rendering it a partial image as per the language of claim 1), said sampling section certainly samples a partial image of a portion of an organism from each of the identification object person and/or the registration object person.

With further regard to claim 1, Applicant alleges Hsu fails to describe a “detection section for detecting, every time a partial image is sampled by said sampling section, a relative positional relationship between the partial image and one of other partial images sampled already”

(Remarks pp. 12). Hsu introduces said detection section in col. 2, ln. 16-20, and expands upon in it col. 9 ln. 27-60, where Hsu’s “feature detection” unit fully comprises the detection section of claim 1.

With still further regard to claim 1, Applicant alleges Hsu fails to describe “an extraction section for extracting, every time a partial image is sampled by said sampling section, characteristic portion data including characteristic information unique to the organism portion from the partial image” (Remarks pp. 12). Hsu introduces said extraction section in col. 2, ln. 16-20 and expands upon it in col. 9 ln. 42-60, where Hsu’s system extracts reference patches not limited to containing ridge bifurcation points which correspond to the extraction section of claim 1.

With yet further regard to claim 1, Applicant alleges Hsu fails to describe “a synthesis section for synthesizing, every time a partial image is sampled by said sampling section, the characteristic portion data of the partial image extracted by said extraction section and characteristic portion data of the other partial image based on the relative positional relationship of the partial image

detected” (Remarks pp. 12). Hsu introduces said synthesis section in col. 2, ln. 22-39 and expands upon in col. 16 ln 10-51, where Hsu’s disclosed feature correlation system uses the relative positional relationship of the images to authenticate an object person every time said partial image is sampled and so meets the limitation of the synthesis section of claim 1.

Therefore, the grounds for rejection of claim 1 under 35 U.S.C. § 102(b) are maintained.

With respect to independent claims 20-22, 24 and 26, Applicant advances no further argument and instead relies on arguments re claim 1 which have been refuted above. Therefore, the grounds for rejection of independent claims 20-22, 24 and 26 under 35 U.S.C. § 102(b) are maintained.

With respect to dependent claims 2-4, 7, 8, 10-12, 16-19, 23, 25 and 27, Applicant advances no further argument and instead relies on arguments re claim 1 which have been refuted above. Therefore, the grounds for rejection of dependent claims 2-4, 7, 8, 10-12, 16-19, 23, 25 and 27 under 35 U.S.C. § 102(b) are maintained.

With respect to dependent claims 5 and 6 rejected under 35 U.S.C. § 103(a), Applicant unsubstantially alleges Morita fails to cure the deficiencies of Hsu and relies on arguments re claim 1 which have been refuted above. As such, the grounds for rejection of dependent claims 5 and 6 under 35 U.S.C. § 103(a) are maintained.

Conclusion

7. Applicant's amendment necessitated the new grounds of rejection presented in this Office Action. Accordingly, **THIS ACTION IS MADE FINAL**. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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Contact

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steve Koziol whose telephone number is (571) 270-1884. The examiner can normally be reached on M - alt. F 8:00-5:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samir Ahmed can be reached at (571) 272-7413. Customer Service can be reached at (571) 272-2600. The fax number for the organization where this application or proceeding is assigned is (571) 273-7332.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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PRIMARY EXAMINER